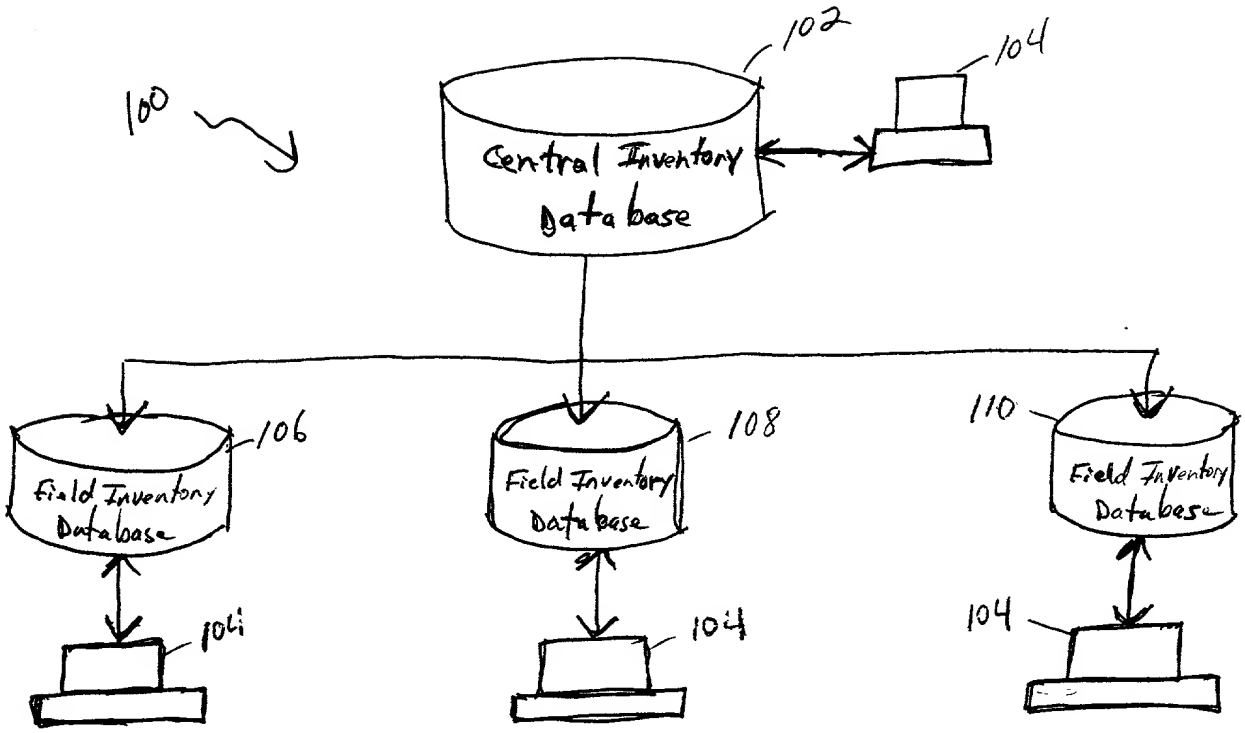
100
102
104
Central Inventory Database
106
Field Inventory Database
104
108
Field Inventory Database
104
110
Field Inventory Database
104

FIG. 1

Product A

202 →

count	price	vintage
1 (210)	#100 (212)	1990 (214)
216 → 2	#100	1991
3	#125	1992
⋮	⋮	⋮
N	#190	2001

204 ↘ Product B

count	price	vintage
1	#130	1993
2	#140	1994
3	#150	1994
⋮	⋮	⋮
K	#215	2001

200 ↗ Product Y ↙ 206

count	price	vintage
1	#100	1989
218 → 2	#100,000	1990
220 → 3	#120	1920
1	⋮	⋮
⋮	⋮	⋮
X	#200	2001

Product Z ↙ 208

count	price	vintage
1	#75	1987
222 → 2	#0.75	1988
224 → 3	#100	2200
1	⋮	⋮
⋮	⋮	⋮
J	#110	2001

FIG. 2

Product Type (302)	Price (304)	Vintage (306)
Product A	$142	1995
Product B	$171	1996
⋮	⋮	⋮
Product Y	$148	1995
Product Z	$93	1993

(300)

FIG. 3

Product Type (402)	Substitutions (404)
Product A	Product B, Product D
Product B	Product A, Product D
⋮	⋮
Product Y	Product O
Product Z	Product M

(400)

FIG. 4

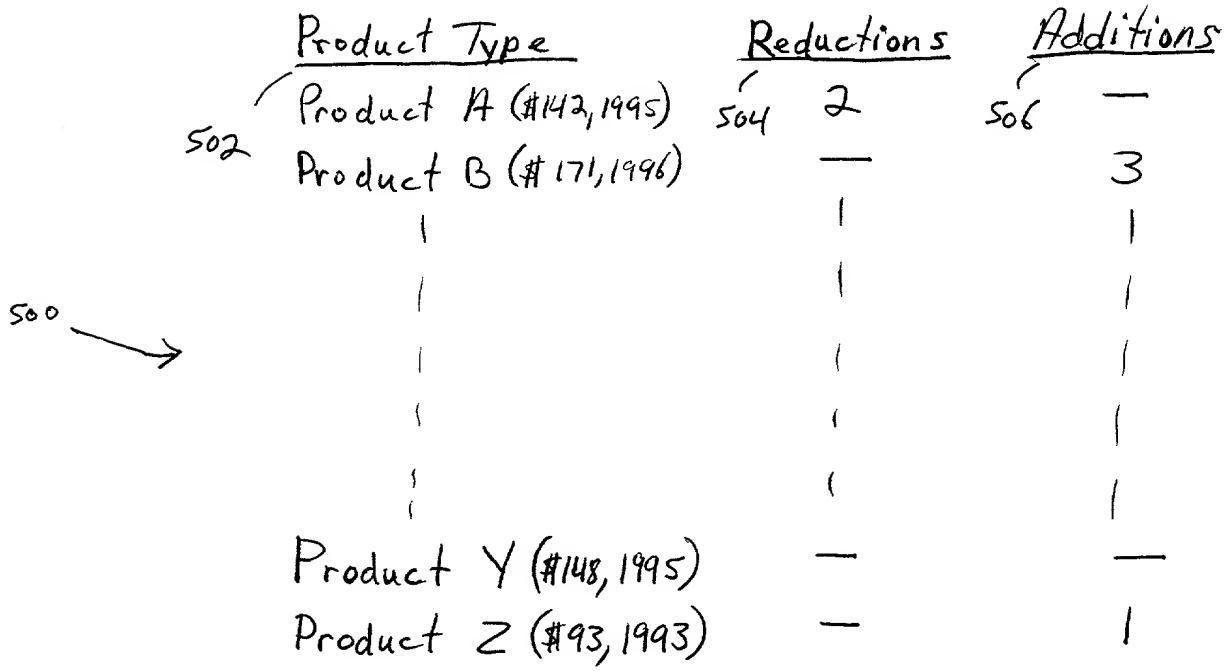
Product Type
Reductions
Additions
502
504
506
500
Product A (#142, 1995)
2
—
Product B (#171, 1996)
—
3
Product Y (#148, 1995)
—
—
Product Z (#93, 1993)
—
1

FIG. 5

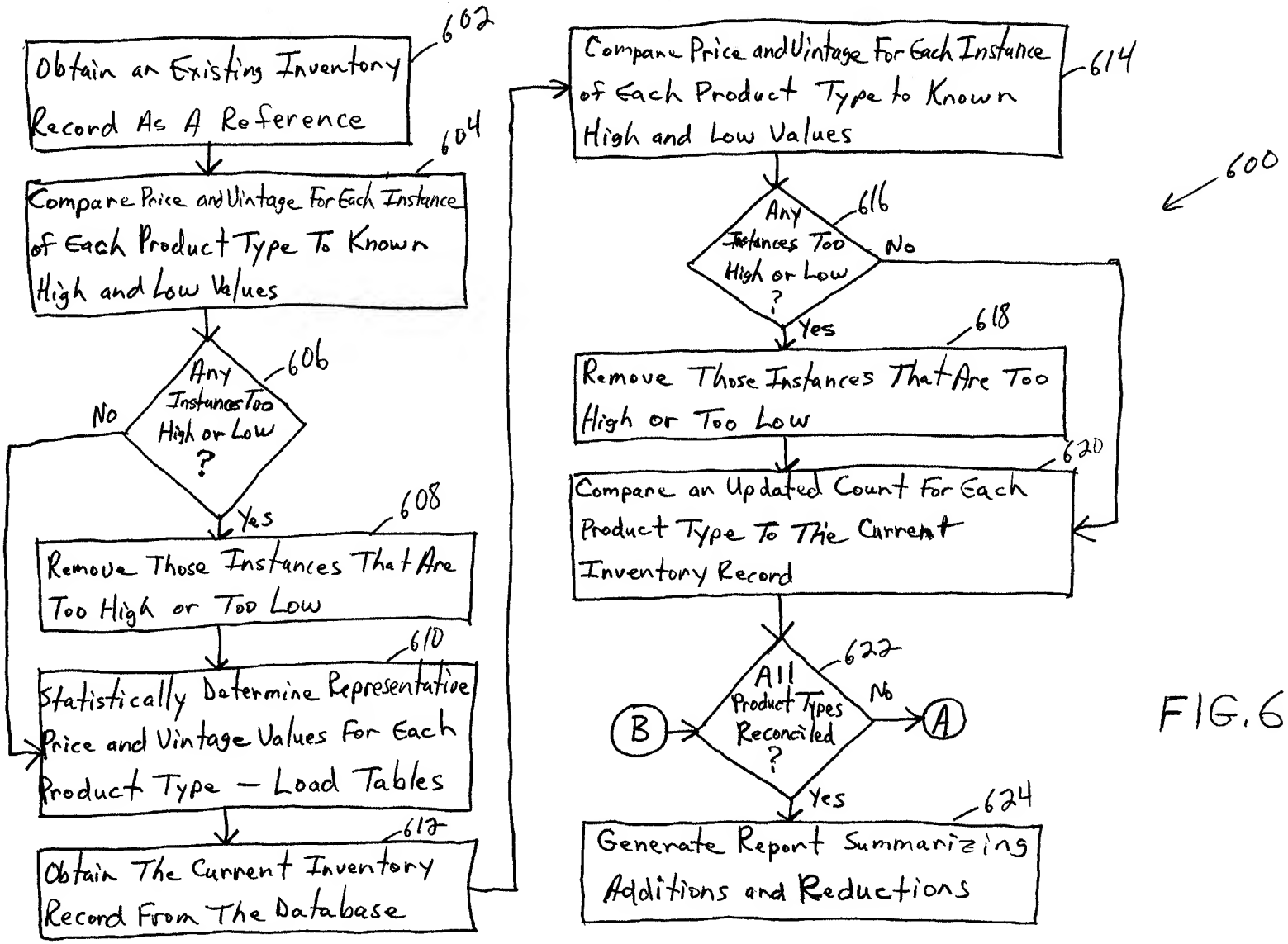
600
602
Obtain an Existing Inventory Record As A Reference
604
Compare Price and Vintage For Each Instance of Each Product Type To Known High and Low Values
606
Any Instances Too High or Low ?
No
Yes
608
Remove Those Instances That Are Too High or Too Low
610
Statistically Determine Representative Price and Vintage Values For Each Product Type — Load Tables
612
Obtain The Current Inventory Record From The Database
614
Compare Price and Vintage For Each Instance of Each Product Type to Known High and Low Values
616
Any Instances Too High or Low ?
No
Yes
618
Remove Those Instances That Are Too High or Too Low
620
Compare an Updated Count For Each Product Type To The Current Inventory Record
622
All Product Types Reconciled ?
No
Yes
A
B
624
Generate Report Summarizing Additions and Reductions

FIG. 6

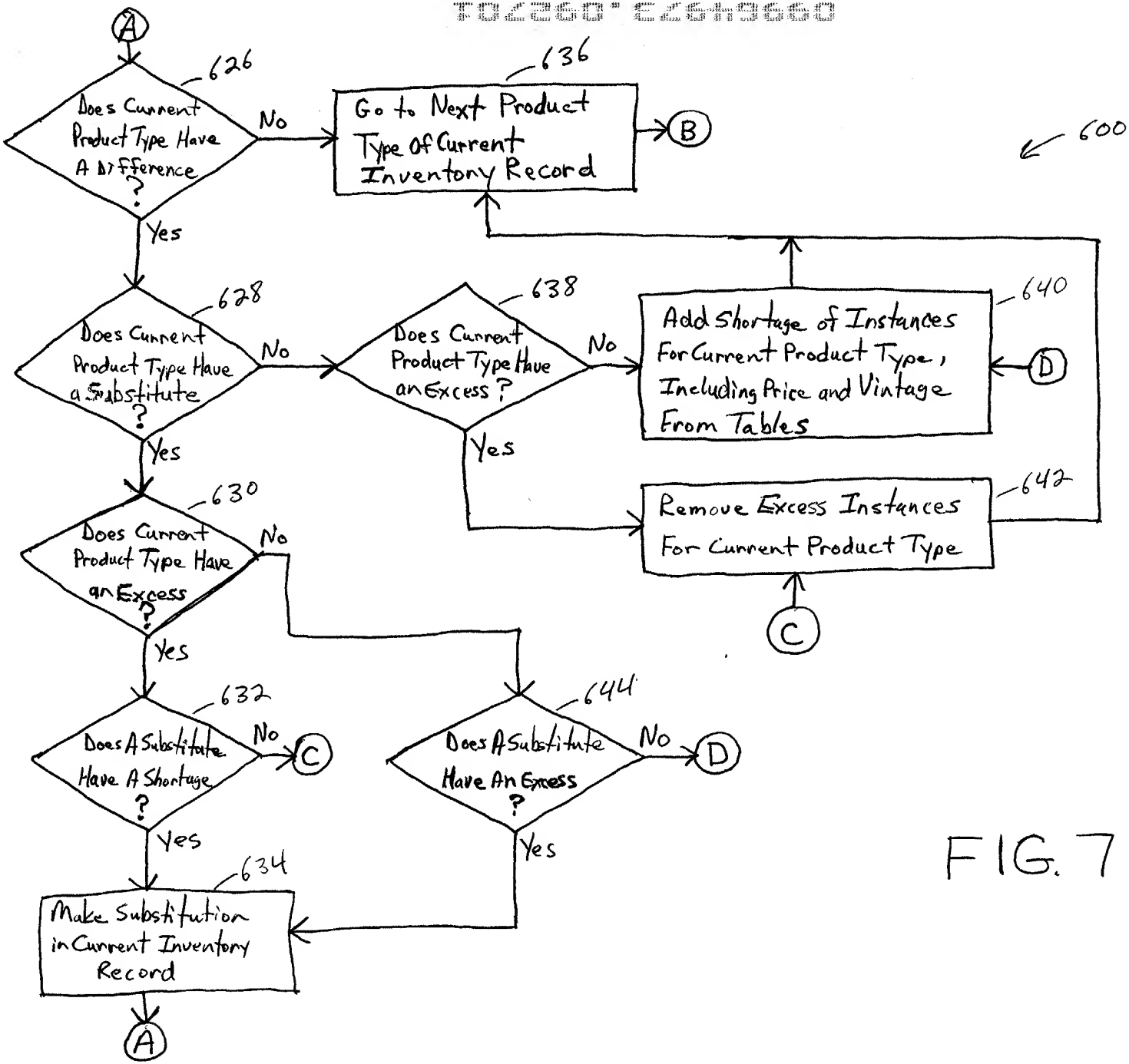
A
626
Does Current Product Type Have A Difference ?
No
636
Go to Next Product Type of Current Inventory Record
B
600
Yes
628
Does Current Product Type Have a Substitute ?
No
638
Does Current Product Type Have an Excess ?
No
640
Add Shortage of Instances For Current Product Type, Including Price and Vintage From Tables
D
Yes
630
Does Current Product Type Have an Excess ?
No
642
Remove Excess Instances For Current Product Type
C
Yes
632
Does A Substitute Have A Shortage ?
No
C
644
Does A Substitute Have An Excess ?
No
D
Yes
Yes
634
Make Substitution in Current Inventory Record
A

FIG. 7